

## 'Italian Navigator Landed 20 Years Ago—Natives Were Friendly'

### It Started Beneath Stagg Field's Squash Court In Experiment

**Mankind 'Took A Giant Step' Twenty Years Ago, Leaping Into Atomic Age From Chicago Stadium**



HERE IS A VIEW FROM THE football playing field at Stagg Field, University of Chicago. The CP-1, the first nuclear reactor, was built beneath the stands. The first controlled reaction by man took place 20 years ago, December 2, 1942.

Wednesday, December 2, 1942 was a cold day in Chicago with a raw wind whipping in from the Lake, giving the city further emphasis on its sobriquet. The 10 degree weather, the second day of gas rationing, the war talk, and the dismal outlook for the future . . . these things do not make history's most fateful day memorable, however. It was on this day that man "wrestled with the gods," to capture energy and control it, the like of which had not been seen on earth before.

The late Dr. Arthur Holly Compton relates: "As a responsible officer of the University of Chicago, I should have taken the matter to my superior. But this would have been unfair. President Hutchins was in no position to make an independent judgment of the hazards involved. Based on considerations of the University's welfare, the only answer he could have given would have been—no. And this answer would have been wrong. So I assumed the responsibility myself. In a building under the west stands of the Stagg athletic field was a squash court. I told Fermi to use this room and go ahead with the critical experiment."

#### "Organized Science's Greatest Achievement"

Henry L. Stimson, the late Secretary of War, called the self-sustaining chain reaction created in Chicago, "the greatest achievement of organized science in history." It has been compared to the day man found how to make fire, manufacture a wheel, or harness any kind of labor-saving power.

Democritus, a Greek, started all the theory of the atom. In 400 B.C., his teachings spurred the ancient alchemists on in their fruitless search of a "Philosopher's Stone" . . . the means of changing base metals into precious ones with all the implications of wealth and power.

#### Matter, Energy Principles Merge

It was not until the eighteenth century that modern science began to unravel its dark mysteries, however. Man learned that matter can be neither created nor destroyed but only altered in form. During the next century another precept emerged, that energy can be neither created nor destroyed, but only altered in form. Thus the cornerstones of modern science were laid.

Albert Einstein stated in 1905 that these two principles are really phases of a single principle, that energy may sometimes be converted into matter and matter into energy. His theory is often referred to as the equivalence of mass and energy.

For 25 years philosophers, physicists, engineers and even comic-strip artists toyed with the idea, which was completely unsupported by practical evidence. In 1930, evidence began to appear in increasing quantity to back up Professor Einstein's ratio of mass and energy.

#### Fermi Began Work Early On Uranium

Enrico Fermi, born in Rome, Italy, in 1901, had been working with uranium for many years. In 1934 he bombarded uranium with neutrons and produced what appeared to be element 93 (uranium is element 92) and element 94. However, after closer examination it seemed as if nature had gone wild; several other elements were present, but none could be fitted into the periodic table near uranium—where Fermi knew they should have fitted. It was not until five years later that Fermi realized he had actually caused fission of the uranium and that these unexplained elements belonged back in the middle part of the periodic table.

In 1938 the fateful move was made. Fermi was awarded the Nobel Prize for his work on transuranic elements. He and his family went to Sweden to receive the prize. The Fascist press in Italy severely criticized him for not wearing a Fascist uniform and failing to give the Fascist salute when the award was presented. This was the "straw that broke the camel's back." The Fermis never returned to Italy. Taking all their possessions with them, they went to London, then on to the United States.

The Italian scientist was unknown to the lay world at that time. Highly respected among leaders of science, he joined in experimental work at Columbia University, which was eventually to take him to the location of Stagg Field.

#### "It Should Be Something Worth Remembering"

A total of 41 men and one lone woman witnessed the historic events of the afternoon of December 2. Dr. Compton willingly chose one of the youngest scientists in the group to accompany him to the famous balcony. "I reasoned that he would probably remember longer than the others what he would see—and it should be something worth remembering."

The dramatics of that first day of the atomic age read better than fiction. Compton describes it as "Atomic power! It has been produced, kept under control, and stopped. The power liberated was less than that needed to light an electric lamp, but that power marked a new era in man's history."

Continued on Page 2

## Credit Union Names Nominating Officers

**Three Board Vacancies To Be Filled For '63**

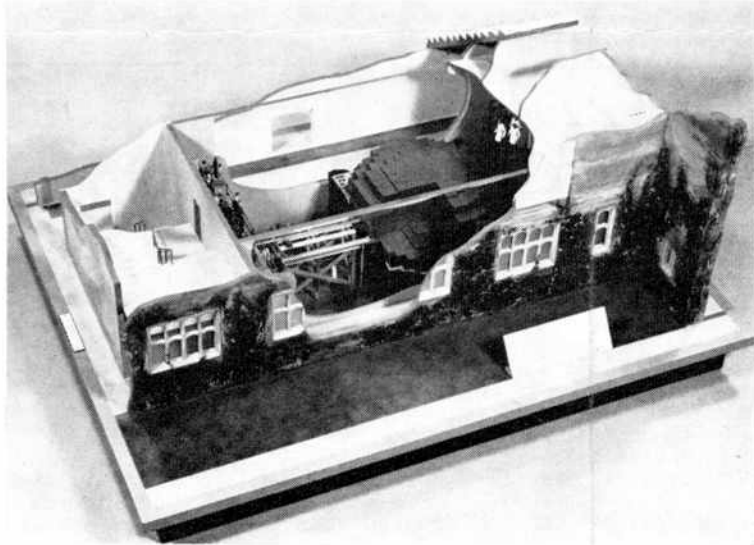
Y-12's Credit Union has named a nominating committee to fill expiring offices for 1963. Three board members will be elected, and two members to the credit committee will be elected at the annual meeting, set for January 16, at the Ridge Recreation Hall.

Chairman of the nominating committee for the Credit Union is William J. Barker, Alpha Five Machine Shop. He resides at 120 Parson Road, Oak Ridge, and has been in Y-12 since June 15, 1944.

The other two members of the committee are Paul L. Patrick, Building, Grounds and Maintenance Shops; and Bruce Hogg, General Machine Shop. Patrick lives at 1099 Piney Woods Road, Kingston, and came to Y-12 June 7, 1951. Hogg, who resides at 106 Umbria Lane, Oak Ridge, came here April 17, 1950.

Present board members include W. R. McGill, Fire and Guard Department; E. G. Richardson, Safety; W. E. Davis, Security; C. V. Ketron, Oak Ridge National Laboratory employee in Y-12; T. J. Stephens, Microreproduction and Engineering Services; W. C.

Continued on Page 4



A SCALE MODEL of the famous CP-1 shows the first pile under the racquets court of the West Stands of Stagg Field at the University of Chicago. It depicts the historic scene on December 2, 1942, when Dr. Enrico Fermi and associates achieved the first self-sustaining chain reaction and thereby initiated the controlled release of nuclear energy.

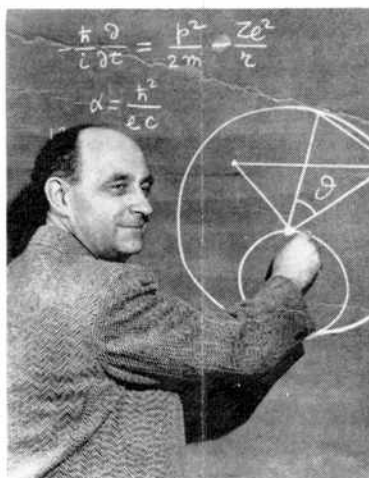
## ORNL's Macklin Will Conduct Physics Seminar

The Oak Ridge National Laboratory Physics Seminar this week will be conducted by R. L. Macklin, of the ORNL Physics Division. His subject will be "Stellar Nucleosynthesis and Kilovolt Neutron Capture Cross Sections."

The seminar is set for Friday, at 3:15 p.m., November 30, in the East Auditorium of ORNL's 4500 building.

## Heart Is Work-Horse For The Human Body

The heart is the work-horse of the human body. It thumps over 100,000 times each 24 hours to pump its daily load of from 5 to 10 tons of blood! Aristotle, who abandoned philosophy long enough to dabble in anatomy, said that the human heart was the body's organ of thinking.



THE ITALIAN NAVIGATOR, Enrico Fermi, was awarded the Nobel Prize in 1938 in Sweden. He decided not to return to Fascist Italy, took his family to England, and then on to America. His zeal and dedication were instrumental in constructing man's first nuclear reactor in Chicago.

## SAFETY SCOREBOARD

The Y-12 Plant Has  
Operated  
19 Days Or  
554,000 Man-Hours  
(Unofficial Estimate)  
Without A Disabling  
Injury  
Through November 25  
Phone 7755  
For Daily Report  
On Accident-Free Hours





A BRONZE PLAQUE marks the historic spot where mankind took his first step into the atomic age. Dr. Arthur H. Compton says he did not clear the experiment through Dr. Hutchins' office, knowing full well that it would not have been approved.

## Atomic Age

Continued from Page 1

Many believe that Fermi, although grasping the historical significance of the moment, was cool, collected and already had his mind moving on to future experiments. He was too interested in laying plans for the next urgent stage of his work.

### Silent Toast Given with Chianti

One of the scientists had smuggled a small bottle of Chianti into the laboratory. Fermi signalled for paper cups and the 41 souls gathered raised a sip of red wine to their lips without any words.

Compton describes Crawford Greenewalt's reaction. "His eyes were aglow. He had seen a miracle. As an industrial engineer, war at this moment was far from his mind. Here was a source of endless power that could warm peoples' homes, light their lamps, and turn the wheels of industry. Vast quantities of new radioactive materials would be available for who knew what great new advances in science."

Then came the now-famous phone call to James B. Conant, chief of the government's nuclear research group. "Jim," Compton said, "you'll be interested to know that the Italian navigator has just landed in the new world."

"The earth was not as large as he had estimated, and he arrived at the new world sooner than he had expected."

"Is that so," was Conant's excited response. "Were the natives friendly?"

"Everyone landed safe and happy," Compton replied.

### 1492 Allusion

The coded allusion was strangely appropriate for the occasion. The "navigator" was Enrico Fermi, in voluntary exile from Italy. The year 1492 could easily be transposed to those numbers to remind the world of another Italian navigator with an idea who was also rejected in his native land, encouraged by a foreign government . . . and who vastly altered the course of the world.

A bronze plaque at the site of the great experiment briefly but dramatically explains what happened that day, twenty years ago this coming Sunday:

ON DECEMBER 2, 1942  
MAN ACHIEVED HERE  
THE FIRST SELF-SUSTAINING  
CHAIN REACTION AND  
THEREBY INITIATED THE  
CONTROLLED RELEASE  
OF NUCLEAR ENERGY

A standing joke around the "Chicago experiment" was the following quote: "If people could see what we're doing with a million-and-a-half of their dollars, they'd think we are crazy. If they knew why we are doing it, they'd be sure we are."

Meanwhile in a secluded valley in East Tennessee, most of the native Scotch-Irish, English descended natives had vacated their lands, making way for what was to be Oak Ridge. One farmer, driving a 1936 pick-up truck, glanced back across the river



A genial fat man was sitting on a bench one day watching a group of shapely young girls in bikinis doing their morning setting up exercises.

"Do you think this sort of thing is really good for reducing?" his sour-faced companion asked.

"No doubt about it," the fat man replied, "I walk nearly three miles every day just to watch."

Walking around Y-12 (without reducing) it's learned, in

### MAINTENANCE

Salvage has A. F. Kendig and his family spending a vacation visiting a daughter in South Carolina . . . C. M. Miller will be spending his vacation working around his home in Oliver Springs.

Buildings, Grounds and Maintenance Shops sends get well wishes to N. B. Keplinger and A. C. Harrington . . . Sympathy is extended the L. M. Thompson family in the recent death of his mother in Pineville, Kentucky . . . E. R. Robinson is planning to visit relatives in South Carolina while on vacation . . . A. J. Hurst will spend his bird-hunting.

The Electrical Department sends speedy get well wishes to Al Sawyer, who underwent surgery recently in Knoxville . . . D. L. Moore plans to spend his vacation doing some work around home that the boss wants done . . . H. I. Melton will be another bird-hunter.

W. W. Potter recently attended the Clinton Lion's Club party at the Andrew Johnson Hotel, Knoxville . . . R. S. Hickey made a flying trip to Florida to attend his niece's wedding . . . Mary Wayne White plans to Christmas-shop and do a little hunting for Santa Claus while on vacation.

The Laundry is sending get well wishes to J. Baird and H. T. Tiller, both on the ailing list . . . Sympathy is expressed to the R. W. Malone family in the death of his sister-in-law.

According to gossip going around the Maintenance Division, Bill Moisson is trying to quit smoking. If some people think a sore-neck bull is short-tempered, they should check with Bill, also with Dick Hayes.

It's hard to realize that this country was founded partly to avoid taxes, isn't it?

### INDUSTRIAL RELATIONS

The Cafeteria is sending best wishes to Frances Brock, off ill . . . George McNamee took a few days off around Thanksgiving to entertain relatives visiting from Romney, West Virginia . . . Irene King vacationed, visiting her mother in Trion, North Carolina . . . Gene Colvard vacationed recently visiting in West Virginia.

Security missed C. C. "Robbie" Roberts last week as he vacationed at home . . . and visited his parents in the Memphis area.

The Fire and Guard Department welcomes J. H. Russell back after a "virus spell" . . . P. C. Dabbs vacationed down around Orlando, Florida, and missed all the beautiful rainy weather. How unlucky can a person get? . . . J. D. Hopkins vacationed back home in Brownsville, Tennessee . . . T. J. Bush got out the old long rifle and went a-bird hunting!

Definition of a gentleman: A man who saves part of his cock-

only once as he crossed the old Edgemoor bridge and approached the railroad crossing. He had to shift into second gear at the grade to the railroad's approach. Without looking back again, he crossed the tracks into tomorrow.

(Editor's note: The Bulletin is indebted to the Public Information Office of Argonne National Laboratory for background material and photographs of the Great Experiment.)

tail to pour on his cigarette ashes, so they won't burn the rug.

### MECHANICAL OPERATIONS

Rolling and Forming reports various vacations . . . C. E. Rose planning an outing or two of bird hunting . . . J. G. Tate going home to Virginia to enjoy Thanksgiving holidays at the old home place . . . J. F. Liasa vacationed in parts unknown.

The Division is sending Mary Ellen Boyd best wishes. She was hospitalized recently . . . Kay Sideris was feted over pink cake and coffee (black) by the girls in MO recently before taking off for duties in the Ad Building. Mary Ellen Boyd, even though absent for the party, made all the arrangements, and gifts of a personal nature were showered on Kay as a remembrance of her many friends around here.

Production Control, a little late with current news, still gets under the wire. Welcome to Pete Rinderer, Marcus Stringfellow and Ralph Vaughan who are transferring from other departments. All have been here quite some time, but it's official now.

Jack Gamble transferred to M-Wing recently after having worked with the special production group for a while . . . Doris Sartell took off for Winchester, Virginia to be with her sick father recently. She reports that he is still in the hospital, but improving . . . Justin Aylor is helping out with production planning and keeping everyone there in a cheerful mood with his broad smile.

Gene Mattie lost his dog in his recent automobile accident, so he's taking three days' vacation to hunt for him. He is a hunting dog, by the way.

Get well wishes to Bob Bass's sons who are in a Knoxville hospital. They are both very young, so our best wishes for their quick recovery are sent over thataway.

Taking off for St. Charles, Louisiana, to be with her son and his family for the Thanksgiving season was Elinor Charpie . . . Patti Matlock took a few days off to Christmas shop . . . Frank Haynes is doing some bird hunting during the holidays . . . C. W. McCollum just lounged around home over on Westland Drive, and enjoyed a Thanksgiving at home.

The Heavy Machine Shop has E. D. Bryant, J. E. Pace, L. P. Stevens, R. F. Wyatt, W. B. Redmon and W. A. Sahr living it up on sundry vacations . . . L. Johnson took last week hunting squirrels around the woods of Kingston . . . C. W. Craven's family always has a family get-together on Thanksgiving so he went to Burlington, North Carolina for the gathering of the clan.

Visiting in Valdosta, Georgia was M. R. Elrod, who hoped to do some bird hunting in that section . . . C. E. Carter is still sick . . . folks hoped that he did force a little turkey down last week . . . Hubert Tripp's wife is ill in Oak Ridge Hospital, best wishes to her.

Two weeks vacationing is Ed Costner, sweating out a visit from the stork.

Alpha Five's E. A. Reed is one of the proudest of fathers. His son weighed in at six pounds, 13 and one-half ounces . . . details more fully later.

For this week's 'doll' preview, the General Machine Shop sends this live one's picture. She's little Deborah Lynn Pettet, granddaughter of W. C. Crowe, born November 1, in Brevard, North Carolina. She was only six days old when this photo was snapped,

### Deborah Lynn Pettet

weighed seven pounds, one ounce at birth.

Other Shop news has K. A. Tidwell on vacation with his family visiting friends and relatives in Detroit. They also planned to take in the Hudson Christmas Parade in Detroit while they are there.

Sam Simmons vacationed last week, but did not tell any plans. Rumors are going around, however, that he spent the week in Florida fishing with friends.

The fine reporter down in Beta Four says she took one look at the insurance company's life expectancy formula in last week's Bulletin, and is sending her dispatch this week from the other side of the grave.

The A-2 Shop is sending get well wishes to J. R. Johns, M. K. Young, J. E. French and B. T. Burress . . . C. E. Crowe and W. J. Shelley transferred in just in time to take vacations . . . Other transferees welcomed aboard are T. C. Tindell, W. Y. Norwood, J. H. Williams, J. D. Starnes and C. D. Shultz. Howdy, boys!

Vacationers are E. J. Redmon, H. C. Parton, S. J. Sargent, H. G. Crews, M. D. Broadway, L. T. Brannock, P. H. Dobbins, A. M. Galyon, C. L. Reed, D. A. Davis, R. L. Brumley, M. B. McCarter, T. T. Randolph, C. H. Helton, W. J. Lynch and J. M. Nevils.

A new grandpop is heralded in the shop as John Turner takes his turn at bat. His daughter, Jean Kay Issacson, is the mother. Charlotte Rea was born October 25, at Independence, Ky., and weighed eight pounds, 12 ounces at launching.

The F-Area has a multitude of bits including D. G. Lincoln vacationing in his home state of Missouri . . . claims it's a good state to be from . . . H. B. West spent his vacation in Birmingham, Alabama . . . D. E. Parten and family are going to Decatur, Illinois to visit kinfolk. He plans to go on shooting AT a few ring-neck pheasants it says here, but it's believed he means pheasants.

Visiting his parents in West Virginia is R. R. Galford, then on to Murfreesboro, Tennessee for the state bowling tournament. Good luck . . . J. D. Bowling stayed around the farm for his vacation . . . J. D. Collins is having relatives visiting from out of town, but planned to practice on his fishing for next summer . . . D. C. Farrell took his family to Miami Beach, Florida.

Off to South Carolina was C. A. Boyd to do some bird hunting, and then on to Georgia to visit his relatives . . . W. T. Luffman and E. Plemens, the Leather Stocking Boys, are planning on some deer hunting while they're off . . . N. B. Bloomer just stayed at home building up his strength to help the Vols in their tilt with Kentucky. Seems like the games this year are harder on the fans than the players! . . . Ralph Black and E. J. Roberts are boarding at the hospital these days, best wishes to them . . . E. R. Stover is ill, and J. L. Armes and R. R. Wilkerson are still sickly. Best wishes to all.

The H-2 Shop has vacationers, namely C. H. Radford, R. E. Stubblefield, H. Trivett, J. C. Gibbs and J. E. Gilstrap . . . Harry Harris was roughing it last week over in the mountains of West Virginia with his brother and several other hunting enthusiasts. He says the hunting of all types of game is legal during open season

in that part of the country. He had hoped to bag a bear, deer, wild turkey, or anything else non-human.

We know someone who couldn't join the Ku Klux Klan. They had monogrammed sheets at home!

### SHIFT SUPERINTENDENTS AND UTILITIES

Vacationing at home last week was G. M. Kirtland . . . C. W. Frazier vacationed this week, but didn't say where, probably stayed at home to eat some of that venison, brought back from that big hunting trip.

W. S. Everett is taking two weeks to visit his sister in Colorado . . . and will probably do some pheasant hunting in Kansas. Folks say you wouldn't believe the number of pheasants that abound in the Western States . . . Vacationing at home are N. W. Evans, J. A. McCall and E. A. Wells . . . Joining the deer-slaying crowd was H. D. Baker.

### ENGINEERING

Tool Engineering is sending get well wishes to the off-spring of two employees . . . Paul Febbo's son is in the hospital, and Kirk Delcour's four-year old daughter Terry was seriously injured by broken glass.

Vacationing over the week-end was C. P. Tudor. The old house painter said that this time he really vacationed, and didn't even pick up a paint brush . . . L. W. McNeil vacationed at home in Knoxville over the holiday week-end, and C. H. Curtis is spending his vacation in Newton, North Carolina . . . Dick Wyrick, Alpha Five, took part in the big Santa Claus parade down Gay Street last week . . . That was Dick on the Boy's Club Float.

It'll never happen to me, you might say . . . so said Bill Hood, but it did. Last week he got his signals mixed a little. Seems how he has two cars and only one garage, staggers his cars accordingly to use. You guessed it, he backed right into his very own with his very own little doodle-bug.

Over in Beta Four J. L. Bassett, reports that the menfolk on the Tellico Deer hunt recently didn't have a bit of luck. They hiked all over the mountain and never even spotted a deer. Maybe they should have taken a hint from the ladies and stayed at the foothills. Seems the girls were too tired to hike so they let the deer come to them. The men say it was all luck, but each gal got herself a deer . . . four-legged ones, too!

### FINANCE & MATERIALS

Vacationing this week in Chattanooga is Dot Conner, Mail Room, who is down thataway to see her mother . . . Lula Bell Justice is vacationing this week with hopes of getting some early Christmas shopping done.

Microreproduction and Engineering Services has T. J. Stephens visiting down in Georgia over the late holiday.

Accounting and Budgets report vacationer Ted Hart huntin' in the Catoosa area . . . and Marvin Flatt visiting relatives in Kingsport.

Our friend up in Paducah, Paul Abell, says that you can't judge women by their clothes these days—there isn't enough evidence. Let's go home!

## The Bulletin

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THERE'S A SAYING GOING ROUND that the winners of the Classic League are never decided until the last line is rolled. Looking at the standings among the big bowlers, this is not hard to understand. The



team at left is the Wasps, which includes W. C. Hoppe, J. D. Davis, H. J. Ratjen, F. K. Clabough and L. N. Wakefield. Capt. R. P. Wallace is not shown. The middle team is the All Stars; Al Townsend, D. W.



Hackett, Capt. Tom Pappas, Paul Evans and H. D. Whitehead. The far right team is the Smelters. They are, from left, Capt. M. B. Edwards, W. C. Shelton, Al Fischer, John Harding, and J. G. McArthur.



THE CLASSIC LEAGUE, Y-12's oldest and biggest bowling aggregation, lines up 16-teams strong on Thursday nights at Ark Lanes. The team at the far left calls itself the Playboys. From left, are Neal



Dow, C. K. Valentine, R. W. Brothers, Ted Higgins, Joe Smryl, and Capt. Dave Smith. The middle team is known as the Tigers. They are L. B. Cabe, Capt. Bill Freels, G. W. Bailey, S. Scott and Frank Tiller.



The team at the right is called the Eightballs. From left, are Capt. Howard Horne, Sam Bishop, Bob Martin, John Towle and S. J. Albright.



Ride wanted from Farragut community, Lovell Road, to Central or North Portal, straight day. Wesley Holly, plant phone 7-8373, home phone Knoxville 966-2855.

Ride wanted or will join car pool from Cumberland Estates, Pleasant Ridge Park section, to Central Portal, straight day. Charles Heisey, plant phone 7-8841, home phone Knoxville 525-5409.

Ride wanted or will join car pool from Hillside, Pennsylvania Avenue section, to West Portal, straight day. Arnold Agee, plant phone 7-8026, home phone Oak Ridge 482-2951.

Ride wanted or will join car pool from Farragut to any portal, F Shift. E. H. Mowery, plant phone 7-8602, home phone Knoxville 966-2792.

## Y-12ers Celebrating 15, 10 Year Anniversaries

Congratulations to the following Y-12ers who will observe 15 and 10 year anniversaries with Carbide within the next few days.

### 15 YEARS

Jesse A. Lewis, Alloy Shop, November 28.

Earl C. Gross, Electrical, December 4.

### 10 YEARS

Lewis S. Skeel, Physical Testing, December 3.

Edwin E. Nichols, Stores Department, December 4.

Elihue Kimblin, Receiving, December 4.

Simeon W. Swicegood Jr., Research Services, December 4.

Get the job done . . . but do it safely.

## Independents Cap 22'ers; Y-12 in Cellar

The ORNL team gained in league standings in the 22 Calibre Rifle League last week as they took highs in scratch as well as handicap firings with scores of 1419, 1451.646 respectively. The Independents scored 1385 scratch, 1440.261 handicap, while the bottom-placed Y-12 team fired 1354, 1443.082.

The Independents' Dave Dewalt scored a high 281 scratch score, while D. Whitehead tallied a 288.035 handicap total.

In the final shoot-out, Y-12's team saw Bob Powers, Bert Searles and Al Blay take the three top slots in that order, with Bill Sims named the most improved new shooter.

Final standings follow:

Team	Points
Independents	53
ORNL	52
Y-12	27

## One Sure Way To Keep 'Em Down On The Farm!

A bright young farmer in the Army overseas received a letter from his wife. She wanted to know how she was going to plant the potatoes in the east 40 without help.

The soldier wrote back, "Whatever you do, don't dig up the east 40. That's where the guns are buried."

As is customary in wartime, his letter was read by the censor. Not long afterwards he received a reply from his upset wife saying, "A company of soldiers overran the east 40 and dug it all up. What shall I do now?"

The reply was swift in coming, and to the point. "Plant the potatoes," the soldier wrote.

## Sunflowers Take C League Lead

### Big Five Rolls 2873 Handicap Series

The C League for Y-12 bowlers got a new leader last week, as the Sunflowers moved into the top slot by virtue of their three-point win over the Par Busters. Previous leaders, the Hi Lifers dropped four full points to the Big Five. Other counts saw the SP's over the Screwballs by four, the Lucky Strikes over the Hookers by three points, and the Rounders—C Shift, Strikers—Rodders matches ended in split scores.

Arnold Tiller, Rounders, took scratch honors with a 227 single, 595 series tally. Lloyd Hamby, Rodders, rolled a high handicap game with a 250 game. Bob Hagood and Tiller tied for high handicap series with 640 each.

The Big Five almost swept team honors with 640 scratch singles, 1025 handicap singles and 2873 handicap series totals. The Rounders gained scratch series high with a 2527.

League standings follow:

Team	Won	Lost
Sunflowers	32	12
Hi Lifers	29½	14½
Rounders	29	15
Lucky Strikes	28½	15½
Big Five	24	20
Strikers	21	23
Par Busters	20	24
C Shift	19	25
Rodders	19	25
SP's	18	26
Hookers	15	29
Screwballs	10	34

## Good Old Days . . .

In the good old days you got baseball stars' pictures in cigarette packs. A leading cigarette maker is now offering a camera for \$2.50 plus the bottom labels from five cigarette packs. The baseball cards? You now get them with bubble gum.

## Skeet League Will Fire Again Sunday

The Swartout-Welfare team took top ratings in the last firings in the Carbide Skeet League with a score of 88, out of a possible 100 perfect score. They were followed by Patton-Preskitt's 82.

The next firing will be Sunday, December 2, at 1 p.m., at the Oak Ridge Sportsmen's Association skeet fields on the Turnpike.

Team standings follow:

Team	Score
Swartout-Welfare	88
Patton-Preskitt	82
Davy-Asmanes	78
Patterson-Murray	71
Bahler-Brewster	64
Case-Hamby	59
Wiest-Bailey	50
McNabb-Powers	37
Sahr-Hopkins	36
Schaefer-Cuthbert	33
Steward-Bender	37
—Incomplete Scores.	

## Hi Balls Sleep Into First Place

### Draw Bye Keeping A Perfect Record

The Bush League got into their second week on the lanes, as Y-12 bowlers took their reorganized teams to the front alleys. The Hi Balls slept their way into first place by drawing a bye. Other scores saw the Lucky Five over the Rollniks by four points. Winning by three, the Dry Hides took the Seven Sixties, and the Rollmasters rolled over the Beavers. The Rusty Five—Reagents duel ended in a draw as the teams split scores of two.

Ray Waldrop, Dry Hides, rolled high single scratch score of 191, while Ray Seivers, Seven Sixties, took high single handicaps with 241. Roy Scates, Reagents, had high series scratch of 509, and John Austin, Lucky Five, came through with high series handicap scores of 617.

The Seven Sixties had high single scratch sums of 853, while the Lucky Five finished the board with 1013, 2344, and 2971 tallies.

League standings follow:

Team	Won	Lost
Hi Balls	4	0
Rusty Five	6	2
Dry Hides	5	3
Lucky Five	5	3
Reagents	5	3
Rollmasters	5	3
Beavers	1	7
Seven Sixties	1	7
Rollniks	0	8

## Three Y-12 Bowling Teams Take Holidays

Three bowling leagues in Y-12 took a rest last week, as the E League, Classic League and Mixed League all rested from the holidays. Play will be resumed this week as the three leagues all move into the home stretch for the first half of league play.





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## Credit Union



W. J. Barker



B. Hogg

P. Patrick

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Moisson, Project Engineering; and Lorena Causey. Three of these board members are on expiring terms.

The Credit Committee consists of H. A. Pohto, Mechanical Engineering; D. W. Hackett, Physical Testing; C. E. Harris, Research Services; Fred Wilkinson, Lorena Causey, Credit Union; and alternate C. C. Bolling, Janitors Department. Two vacancies will occur on this committee.

Expiration of offices are so staggered that not more than three vacancies on the board of directors will occur annually.

E. G. "Sunny" Richardson has served as president of the Credit

## Y-12 Represents Huge Investment

The Y-12 Plant, according to a recent financial report, represents an investment of \$400,800,000. The Atomic Energy Commission facilities here represent a total investment of nearly a billion and a half dollars, the latest AEC financial report shows.

The total plant and equipment investment as of June 30 are worth \$1,455,300,000 with construction projects underway which will bring the total to \$1,586,200,000.

The AEC facilities breakdown in investment is as follows: Oak Ridge Institute of Nuclear Studies, \$3,900,000; Agricultural Research Laboratory, \$1,700,000; Experimental Gas-Cooled Reactor, \$500,000; Oak Ridge Gaseous Diffusion Plant, \$844,600,000; Y-12 Plant, \$400,800,000; Oak Ridge National Laboratory, \$183,400,000; and service facilities \$20,400,000.

## Cans Can And Do Have Many Daily Applications

One hundred years ago a skilled worker could cut, fold and solder five to six tin cans an hour. Today, million-dollar machines crank out 30,000 an hour! Almost everything is going into cans these days, too. Not only foods and drugs, but cosmetics, home cleaning and automotive products... even art supplies and tennis balls are stored in tin containers.

Union for 1962. The president is elected by board members.

Production without security avails us nothing.

# Christmas Dance Marked For December 14 While Children's Parties Will Be Given December 22



O. J. BAILEY'S ORCHESTRA

"Christmas is coming... the goose is getting fat." And Y-12ers are not folks to idly sit by without planning for the gala season.

The first date to mark on the calendar now is Friday, December 14. That's the traditional Christmas Dance for Y-12ers, an event that has been going longer than most care to remember.

The dance will feature O. J. Bailey's Orchestra, from Chattanooga, the successful combination of music-makers that were here last winter, and again for the Spring Dance. Dancing gets underway at 9 p.m. and will last until 1 a.m. There'll be the usual fine array of door prizes, details later.

Tickets will be available at the door of the Oak Terrace prior to the shin-dig, or may be obtained in advance from the Recreation Office. As usual, the low price of \$1.50 per ducat prevails. Simple mathematics makes this \$3 per couple.

Another date to circle is the

magic Saturday, December 22... the day Carbide kids get together to 'whoop' it up. The Recreation Departments from the three Oak Ridge plants have really gone overboard this year to lend assistance to old St. Nick. First off, there'll be Chester "Bobo" Barnett, the tramp so widely known

the world over. He'll bring along his dogs, his tiny car, and all his tragic-funny tricks. Colored cartoons will live up the small scene, and, of course, the jolly old fat man will make an appearance at each of the parties.

Remember, there's one day only this year, with hours of 9 and 11 a.m., and 1, 3 and 5 p.m. That's Saturday, December 22, at the Oak Ridge High School Auditorium. Fred O. Johnsson, of the Oak Ridge Gaseous Diffusion's Inspection Department, will emcee the festivities.

The attached ticket application should be mailed as soon as possible to the Recreation Department, Room 149, Building 9704-2. First and second choices of times should appear, and the tickets will go on a first-come, first-served basis. Tickets will be mailed to the homes of employees. Get yours in today, and make sure the small-fry have reserved tickets for their merry holiday party!



"THE WAY-UP" was the highly interesting topic of Konrad Dannenberg's speech at the recent Bosses' Night festivities for the Secretaries Association. Here Dannenberg illustrates his lecture with a model of the Saturn rocket, destined to hurl American astronauts into orbit for an eventual moon-landing. More than 100 secretaries, bosses and guests attended the gala function. Dannenberg is Deputy Director, Saturn Systems Office of NASA's Marshall Space Flight Center, Huntsville, Alabama.

## Report Illness Whenever Possible; Turn Machine Off

If you feel sick at work or are working with someone who becomes sick, let your supervisor know about it right away. If he isn't available at the moment, tell someone in your department and report to the plant dispensary. Be sure to report to your supervisor upon your return. Before leaving your work area, make sure that all machinery is off. If necessary, ask someone else to do this.



CARBIDERS GREET THE DANNENBERGS—At the November 10 meeting of the Ninth Annual Secretaries Boss Night, Robert G. Jordan, Oak Ridge Gaseous Diffusion Plant Superintendent, is seen at left, with Mr. and Mrs. Konrad Dannenberg, and Mabel Tyer, Y-12. In the background at right is C. H. Oakley, City of Oak Ridge, who was named "boss of the year." Dannenberg was special guest at the NSA banquet held at the C'est Bon Club, Knoxville.

## Application For Tickets

TO

## Christmas Parties

FOR CHILDREN OF CARBIDE EMPLOYEES

(Ages Two-10 Only)

SATURDAY, DECEMBER 22

Employee's Name \_\_\_\_\_ Badge No. \_\_\_\_\_

Home Address \_\_\_\_\_  
(PLEASE PRINT—STREET ADDRESS OR R.F.D., CITY)

NUMBER OF TICKETS (Children) \_\_\_\_\_

NUMBER OF TICKETS (Adult) \_\_\_\_\_

— CHECK TIME PREFERRED —

Saturday, December 22 9 A.M. \_\_\_\_\_ 11 A.M. \_\_\_\_\_  
Only 1 P.M. \_\_\_\_\_ 3 P.M. \_\_\_\_\_ 5 P.M. \_\_\_\_\_

Please check first and second choice (write in space "1" or "2") as only a limited number of tickets will be issued for each party. Preference will be given early applicants and if tickets for first choice are exhausted, tickets for second choice will be issued.

Return this form, properly and completely filled in, immediately to the Y-12 Recreation Office, Room 149, Bldg. 9704-2, NOT LATER than December 18. The required number of tickets will then be mailed to parents at their HOME ADDRESS.